

Proposed Part 70 Minor Revision 12925 and Permit to Operate 12925

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EQUIPMENT OWNER/OPERATOR:

E & B Natural Resources 300000

EQUIPMENT LOCATION:

South Cuyama Unit, located in the South Cuyama area of Santa Barbara County

STATIONARY SOURCE/FACILITY:

E & B - South Cuyama SSID: 01073 South Cuyama Unit (SCU) SID: 01074

EQUIPMENT DESCRIPTION:

The equipment subject to this permit is listed in the table at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

Tank Farm #6 and Tank Farm #18 are two of several tank farms at the South Cuyama Unit used to gather production from oil & gas wells. The oil, water, and gas are separated at the tank farms and are then sent via pipeline to other facilities for further processing. Several modifications have been made to these two tank farms.

The following changes were made to Tank Farm #6 under ATC 12833 and ATC 12833-01. These modifications allow E&B the flexibility of blending natural gas liquids (NGLs) from Gas Plant 10 into the produced oil stream while staying within the pipeline operator's true vapor pressure (TVP) limits.

- 1. The permitted TVP was decreased from 13.5 psia to 10 psia for the two LACT tanks.
- 2. The permitted throughput at Tank Farm #6 was reduced from 2,000 bond to 1,970 bond.
- 3. The permitted true vapor pressure for the wash tanks was lowered from 8 psia to 2.64 psia because NGLs are no longer processed through the wash tanks.

The following changes have been made to Tank Farm #18 under ATC 12925:

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- 1. Increased the throughput for the 1,000 bbl test tank (ID# 000612) from 36 BOPD to 500 BOPD.
- 2. Corrected the emission calculations for the 1,250 bbl wash tank (ID# 000613). The emissions had previously been calculated as crude tank emissions.
- 3. Installed a new 1,000 bbl crude tank (ID# 112293) that is connected to vapor recovery.
- 4. Removed from permit the 2,000 bbl stock tank (ID# 000614) and the 2,000 bbl LACT tank (ID# 000765).

These changes have been included in this permit.

CONDITIONS:

9.A Standard Administrative Conditions

The following federally-enforceable administrative permit conditions apply to the facilities of the South Cuyama Unit:

A.1 Compliance with Permit Conditions:

- (a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and C.
- (b) This permit does not convey property rights or exclusive privilege of any sort.
- (c) Non-compliance with any permit condition is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or denial of permit renewal. Any permit non-compliance constitutes a violation of the Clean Air Act and its implementing regulations or of APCD Rules or of both, as applicable.
- (d) The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for noncompliance with any permit condition.
- (e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.
- (f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
 - (i) compliance with the permit, or
 - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.

[Re: 40 CFR Part 70.5.(a)(6)(iii), APCD Rules 1303.D.1.j, 1303.D.1.n, 1303.D.1.l, 1303.D.1.k, 1303.D.1.o]

A.2 **Emergency Provisions:** The permittee shall comply with the requirements of the APCD, Rule 505 (Upset/Breakdown rule) and/or APCD Rule 1303.F, whichever is applicable to the

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emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the APCD, in writing, a "notice of emergency" within 2 days of the emergency. The "notice of emergency" shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [Re: 40 CFR 70.6(g), APCD Rule 1303.F.]

A.3 Compliance Plan:

- (a) The permittee shall comply with all federally-enforceable requirements that become applicable during the permit term, in a timely manner.
- (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.

[Re: APCD Rule 1302.D.2]

- A.4 **Right of Entry:** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:
 - (a) To inspect at reasonable times the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
 - (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
 - (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times.

[Re: APCD Rule 1303.D.2.a]

- A.5 **Severability:** The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [Re: APCD Rules 103, 1303.D.1.i]
- A.6 **Payment of Fees:** The permittee shall reimburse the APCD for all its Part 70 permit processing and compliance monitoring expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the APCD and the USEPA pursuant to section 502(a) of the Clean Air Act. [Re: APCD Rules 1303.D.1.p, 1304.D.11 and 40 CFR 70.6(a)(7)]
- A.7 **Prompt Reporting of Deviations:** The permittee shall submit a written report to the APCD documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7-days after discovery of the violation, but not later than 180-days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation, 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to

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deviations reported to APCD in accordance with Rule 505. *Breakdown Conditions*, or Rule 1303.F *Emergency Provisions*. [APCD Rule 1303.D.1, 40 CFR 70.6(a) (3)]

- A.8 **Federally-Enforceable Conditions.** Each federally-enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the APCD-only enforceable section of this permit are federally-enforceable or subject to the public/USEPA review [Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)]
- A.9 **Reporting Requirements/Compliance Certification:** The permittee shall submit compliance certification reports to both the USEPA and the Control Officer every six-months. These reports shall be submitted on APCD forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year. Supporting monitoring data shall be submitted in accordance with the "Semi-Annual Monitoring/Compliance Verification Report" condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [Re: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c]
- A.10 **Recordkeeping Requirements**: Records of required monitoring information that includes the following:
 - (a) The date, place as defined in the permit, and time of sampling or measurements;
 - (b) The date(s) analyses were performed;
 - (c) The company or entity that performed the analyses;
 - (d) The analytical techniques or methods used;
 - (e) The results of such analyses; and
 - (f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the APCD upon request. [Re: APCD Rule 1303.D.1.f, 40CFR70.6(a)(3)(ii)(A)]

- A.11 **Conditions for Permit Reopening:** The permit shall be reopened and revised for cause under any of the following circumstances:
 - (a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30-day notice of intent to

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reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.

- (b) <u>Inaccurate Permit Provisions</u>: If the APCD or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.
- (c) <u>Applicable Requirement</u>: If the APCD or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally-enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen and revise/revoke/reissue a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exist.

If a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [Re: $40 \ CFR \ 70.7(f)(1)$ -(3), $40 \ CFR \ 70.6(a)(2)$]

9.B. Generic Conditions

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally-enforceable. Compliance with these requirements is discussed in Section 3. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

- B.1 **Circumvention (Rule 301):** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of APCD Rule 303. [Re: APCD Rule 301]
- B.2 **Nuisance (Rule 303):** No pollutant emissions from any equipment at this facility shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [Re: APCD Rule 303]

9.C Equipment Specific Conditions

This section contains non-generic federally-enforceable conditions, including emissions and operations limits, monitoring, recordkeeping, and reporting for each specific equipment group. This section may also contain other non-generic conditions. The following conditions supersedes conditions C.6 and C.7 of Part-70/PTO 7250-R7 issued June 2, 2008. All other permit conditions remain unchanged and in full force.

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C.3 **Petroleum Storage and Processing Tanks:** The following equipment is included in this emissions category:

Tanks Subject to Federal Requirements

Device #	Description	Size (bbl)	Device#	Description	Size (bbl)
000587	TF #2: Wash Tank w/VRS	1,250	000617	Hibbard #7: Stock Tank w/VRS	1,000
000588	TF #2: LACT Tank w/VRS	2,000	000618	Hibbard #7: Test Tank w/VRS	500
000586	TF #2: Stock Tank w/VRS	2,000	000766	Hibbard #7: Stock Tank w/VRS	1,000
000589	TF #2: Test Tank w/VRS	1,000	008302	TF #10: Crude Oil Slop Tank w/VRS	2,000
000594	TF #6: Test Tank w/VRS	1,000	000611	TF #17: Test Tank	200
105087	TF #6: Wash Tank w/VRS	1,500	000612	TF #18: Test Tank w/VRS	1,000
105964	TF #6: Wash Tank w/VRS	1,250	000613	TF #18: Wash Tank w/VRS	1,250
109943	TF #6: Wash Tank w/VRS	5,000	112293	TF #18 Crude Tank w/VRS	1,000
000763	TF #6: LACT Tank w/VRS	1,000	000620	Machader: Oil Recovery Tank	100
000596	TF #6: LACT Tank w/VRS	1,000	008303	Perkins: Hot Water Tank	500
000616	Hibbard #7: Wash Tank w/VRS	625			

(a) Emission Limits: Mass emission for the tanks listed above shall not exceed the limits listed in Tables 5.1 through 5.3. The federally-enforceable limits are denoted by a "FE" and a reference for the limit right hand column of Tables 5.1-3 and 5.1-4. Compliance with these limits shall be met by meeting the monitoring, recordkeeping and reporting outlined in (d) and (e) below.

(b) Operational Limits:

- 1. The true vapor pressure of the blended crude oil and LPG processed in the LACT Tanks (IDs# 000596 & 000763) at Tank Farm #6 shall not exceed 10.0 psia.
- 2. NGLs shall not be processed through the wash tanks at Tank Farm #6.
- 3. The following tanks or tank farms as specified in the table below are subject to the federally-enforceable throughput limits listed in the table below (Note: the ATC basis for federally enforceability is noted in the table).

ltem	Operation/Throughput Limit	ATC
Tank Farm #6	1,970 BOPD for entire tank farm	10849, 11558, 12883, 12883-01
Tank Farm #10	365 days/yr, 300 BOPD	9592
Tank Farm #17	25 BOPD for entire tank farm	7250
Tank Farm #18	1,000 BBL Test Tank, 500 BOPD	12925
Tank Farm #18	Wash Tank & Crude Tank, 588 BOPD each	12925

4. All process operations from the equipment listed in this condition shall meet the requirements of APCD Rules 325 Sections D, E, F and G. Rule 325.D requires the tanks to be connected to vapor collection and removal device(s) prior to their operation, and the vapor removal efficiencies to be no less than 90-percent, unless the tank meets one of the exemptions in Section B of Rule 325. The Machader oil

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recovery tank (Devise ID# 000620) may operate without vapor recovery as long as it remains below the Rule 325 applicability requirement for crude oil having a true vapor pressure less than 0.5 psia: Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

The tanks listed in the table below titled "Tanks That Shall Not Operate" require installation of vapor recovery systems or other equivalent systems. E&B apply for and obtain an Authority to Construct permit prior to operating these tanks.

	Tanks That Shall Not Operate	
Device #	Description	Size (bbl)
000616	TF#7 (Hibbard) Wash Tank	625
000617	TF#7 (Hibbard) Stock Tank	1,000
000766	TF#7 (Hibbard) Stock Tank	1,000
000618	TF#7 (Hibbard) Test Tank	500
000611	TF #17: Test Tank	200

- 4. Pursuant to Rule 343, Sections D, E, F and G, the permittee shall use a control device, approved in advance by the APCD, when degassing or purging any stationary tanks, vessels, or containers which process odorous sulfur compounds provided the tank is subject to the Rule. These operations shall be conducted with the permittee's tank degassing plan as approved by the APCD on September 20, 1995 and subsequent APCD-approved revisions. A list of all vessels operated by the permittee is provided in Section 10.4 of this permit for reference.
- 5. The Perkins hot water tank (Devise #008303) must not receive any wastewater that has not previously undergone at least three stages of separation prior to introduction into the tank.

(c) Monitoring:

- 1. The volumes of the oil/NGL mixture (in bbls) processed through LACT Tank #1 and LACT Tank #2 at Tank Farm #6 shall be measured through the use of calibrated meters or through the use of an APCD-approved alternate method. The meter shall be calibrated according to manufacturer's specifications and the calibration records shall be made available to the APCD upon request.
- 2. Measure the true vapor pressure of the blended crude oil and NGLs in the Tank Farm #6 LACT tanks on an annual basis. The sample shall be taken as described in *Crude Oil Sampling* condition of this permit, and the TVP shall be measured per the Rule 325.G.2 procedure. The operator shall make pipeline run tickets that list the vapor pressure of shipments from Tank Farm #6 available to the APCD on request. In addition, the permittee shall, for all degassing events, monitor the

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volume purged, characteristics of the vapor purged, and control device/method used.

- 3. The equipment listed in this condition is subject to all the monitoring requirements of APCD Rule 325.H. The test methods outlined in APCD Rule 325.G shall be used, when applicable. In addition, the permittee shall, for all degassing events, monitor the volume purged, characteristics of the vapor purged, and control device/method used.
- (d) Recordkeeping: The following records shall be maintained by the permittee and shall be made available to the APCD upon request:
 - a. The volume of oil/NGL mixture processed each month through Tank Farm #6 and the number of days that oil/NGLs were processed through Tank Farm #6.
 - b. The API gravity and the true vapor pressure shall be based on the maximum expected operating temperature for each crude oil storage tank. The tank temperature shall also be recorded at the time of API gravity and vapor pressure tests.
 - c. Records required by APCD Rules 325.F and 331.G. In addition, The permittee shall maintain a log of all degassing events, and record all the parameters listed in Condition C.3.(c) above.
 - e. <u>Reporting</u>: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit.

[Re: ATC 10849, ATC 10954, ATC 11558, ATC 12883, and ATC 12883-01, 40 CFR 70.6(a)(3), APCD Rules 206, 325, 343 and 1303]

- C.7 **Semi-Annual Monitoring/Compliance Verification Reports**: The permittee shall submit a report to the APCD every six-months to verify compliance with the emission limits and other requirements of this permit. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year, and shall be in a format approved by the APCD. All logs and other basic source data not included in the report shall be available to the APCD upon request. The second report shall also include an annual report for the prior four quarters. The report shall include the following information:
 - (a) <u>Fugitive Hydrocarbon I&M Data</u> (Only required to be submitted with July through December report):
 - inspection summary.
 - record of leaking components.
 - record of leaks from critical components.
 - record of leaks from components that incur five repair actions within a continuous 12-month period.
 - record of component repair actions including dates of component re-inspections.

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- (b) Petroleum Storage and Processing Tanks: All data required by Condition 9.C.3.(d).
- (c) Wastewater Tanks, Pits and Well Cellars: All data required by Condition 9.C.4.(d).
- (d) Gas Station: Total gasoline throughput on a monthly basis.
- (e) Surface Coating and Solvent Usage: On a monthly basis the amount of surface coating/solvent used at the entire stationary source; the percentage of ROC by weight (as applied); the surface coating/solvent density; the amount of solvent reclaimed; whether the surface coating/solvent is photochemically reactive; and, the resulting emissions of ROC and photochemically reactive surface coatings/solvents to the atmosphere in units of pounds per month.
- (f) Throughput: The volume of oil produced each month and the number of days that oil was produced through the tank farms.
- (g) <u>Throughput</u>: The volume of blended oil/NGLs processed each month through Tank Farm #6 and the number of days that oil/NGLs were processed through the tank farm.
- (h) <u>Vapor Pressure</u>: The annual true vapor pressure of the blend of crude oil/NGLs processed though Tank Farm #6.
- (i) <u>Throughput</u>: The volume of oil processed each month through the 1,000 bbl test tank at Tank Farm #18 and the number of days that oil was processed through the test tank.
- (j) Throughput: The volume of oil processed each month through the wash tank and the crude tank at Tank Farm #18 and the number of days that oil was processed through the tanks.
- (k) Emissions: Monthly NO_X and ROC emissions from both permitted and exempt equipment summarized on an annual basis.

[Re: 40 CFR 70.6(a)(3)(iii), APCD Rules 206 and 331]

9.D APCD-Only Conditions

The following section lists permit conditions that are not enforceable by the USEPA or the public. However, these conditions are enforceable by the APCD and the State of California. These conditions are issued pursuant to APCD Rule 206 (Conditional Approval of Authority to Construct or Permit to Operate), which states that the Control Officer may issue an operating permit subject to specified conditions. Permit conditions have been determined as being necessary for this permit to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any condition specified pursuant to the provisions of Rule 206 shall be a violation of that rule, this permit, as well as any applicable section of the California Health & Safety Code.

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- D.1 **Permit Activation.** All aspects of this permit are enforceable by the APCD and the State of California upon the issuance date stamped below. The Part 70 aspects of this permit are not final until:
 - (a) The USEPA has either provided written comments to the APCD and these comments require no modification to this permit or the USEPA does not provide written comments during their review period. The APCD will issue a letter stating that this permit is a final Part 70 permit. The effective date that this permit will be considered a final Part 70 permit will be the date stamped on the APCD's letter.
 - (b) After the USEPA has provided the APCD written comments that require a modification to this permit, the APCD will modify this permit to address the USEPA's comments and issue the Part 70 permit as final. The re-issued permit will supersede this permit in its entirety.

AIR POLLUTION CONTROL OFFICER

MAR 0 5 2010

DATE

Attachments:

- Permit Equipment List
- Tables 5.1-1 through 5.1-4
- Permit Evaluation for Permit to Operate 12925

Notes:

- Reevaluation Due Date: June 2, 2011
- Stationary sources are subject to an annual emission fee (see Fee Schedule B-3 of Rule 210).
- Annual reports are due by March 1st of each year.
- This permit supersedes ATC 12925 issued in March 2009 and ATC 12883-01 issued in July 2009.

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PROPOSED Equipment List for Part 70 Minor Revision 12925 / Permit to Operate 12925

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PERMIT EQUIPMENT LIST - TABLE A

PTO 12925 / FID: 01074 South Cuyama Unit (SCU) / SSID: 01073

A PERMITTED EQUIPMENT

1 Tank Farm #6

1.1 Wash Tank

Device ID #	105964	Device Name	Wash Tank
Rated Heat Input Manufacturer Model Location Note	Tank Farm #6	Physical Size Operator ID Serial Number	1250.00 BBL
Device Description			d, connected to a vapor 2.64 psi.

1.2 Wash Tank

Device ID #	109943	Device Name	Wash Tank
Rated Heat Input		Physical Size	5000.00 BBL
Manufacturer	Superior Tank Company	Operator ID	
Model		Serial Number	
Location Note	West side of the 1,00	00 bbl LACT tank at Perki	ins Tank Battery #6.
Device		by 24 feet high, connecte	
Description		apor pressure = 2.64 psi.	

1.3 Wash Tank

Device ID #	105087	Device Name	Wash Tank
Rated Heat Input		Physical Size	1500.00 BBL
Manufacturer		Operator ID	
Model		Serial Number	
Location Note	Tank Farm #6		
Device	21.5 feet in diamete	er by 24 feet high, unheate	ed, connected to a vapor
Description		color: tan. Permitted vapor	

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1.4 LACT Tank

Device ID #	000596	Device Name	LACT Tank
Rated Heat Input		Physical Size	1000.00 BBL
Manufacturer .		Operator ID	
Model		Serial Number	1260
Location Note	Tank Farm #6		
Device	21.5 feet in diamete	er by 16 feet high, unheate	d, connected to a vapor
Description	recovery system. N	latural Gas liquids from Ga	as Plant 10 are blended into
,		k. Permitted vapor pressu	

1.5 LACT Tank

Device ID #	000763	Device Name	LACT Tank
Rated Heat Input Manufacturer	,	Physical Size Operator ID	1000.00 BBL
Model		Serial Number	R30352
Location Note	Tank Farm #6		
Device	21.5 feet in diamete	r by 16 feet high, unheate	d, connected to a vapor
Description	recovery system. N		as Plant 10 are blended into

2 Tank Farm #18

2.1 Test Tank

Device ID #	000612	Device Name	Test Tank
Rated Heat Input		Physical Size	1000.00 BBL
Manufacturer [*]		Operator ID	
Model		Serial Number	1202
Location Note	Tank Farm #18		
Device	21.5 feet in diameter	by 16 feet high, unheate	d, connected to the vapor
Description	recovery system. Co		-

PROPOSED Equipment List for Part 70 Minor Revision 12925 / Permit to Operate 12925

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2.2 Crude Oil Tank

Device ID #	112293	Device Name	Crude Oil Tank
Rated Heat Input		Physical Size	1000.00 BBL
Manufacturer		Operator ID	
Model		Serial Number	
Location Note	Tank Farm #18		
Device	21.5 feet in diameter	by 16 feet high, connecte	ed to the vapor recovery
Description	system. Color: Tan		

Table 5.1-1
Permit to Operate 12925
E&B South Cuyama Unit
Equipment Description
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Equipment		Device									Hours Per	<u></u>
Category	Description	曹	Feed	Parameter	Capacity	Units	Size Ur	Units	Load	day	qtr	year
				%S as HZS								
Ext. Combustion	Ext. Combustion Perkins: Hot Water Heater	000631	5	0.0796	8,760 MMBtu/yr	(Btu/yr	1.000 MMBtu/hr	/Btu/hr		24	2,190	8,760
Fugitives	Valves and Fittings	101050	ı		1		220 W	wells	-	24	2,190	8,760
	Pumps/Compressors and Wellheads	000738	1	عي م	1		220 w	wells		24	2,190	8,760
Tanks	TF #2: Stock Tank w/VRS	000586	O/W	2.64	pdoq 0	pd	2,000 Ba	Barrels	-	24	2,190	8,760
	TF #2: Wash Tank w/VRS	000587	SVO	2.64	588 bopo	ъď	1,250 Ba	Barrels	-	74	2,190	8,760
	TF #2: LACT Tank w/VRS	000588	WO	2.64	400 bopd	Z	2,000 Bs	Barrels	_	24	2,190	8,760
	TF #2: Test Tank w/VRS	000589	W/O	2.64	36 bopd	뎚	1,000 Ba	Barrels	÷	24	2,190	8,760
	TF #8: Test Tank w/VRS	000594	% O	2.64	pdoq gg	뎚	1,000 Ba	Barrels	_	24	2,190	8,760
	TF #8: 1,500 bbl Wash Tank w/VRS	105087	ονν	2.64	1,970 bopd	뎚	1,500 BB	Barrels		24	2,190	8,760
	TF #5: 1,250 bbl Wash Tank w/VRS	105964	WO OW	2.64	1,970 bopd	멅	1,250 Bs	Barrels	_	24	2,190	8,760
	TF #8: 5,000 bbl Wash Tank w/VRS	109943	WO	2.64	1,970 bopd	둺	5,000 Ba	Barrels	-	24	2,190	8,760
	TF #6: LACT Tank w/VRS	965000	OW	10.00	1,970 bopd	젎		Barrels	, -	54	2,190	8,760
	TF #6: LACT Tank w/VRS	000763	360 0	10.00	1,970 bopd	Бď	1,000 Ba	Barrels	↽	25	2,190	8,760
	Hibbard #7: Wash Tank w/VR	000616	.wo	2.64	353 bopd	Z	625 Ba	Barrels	-	K)	2,190	8,760
	Hibbard #7: Stock Tank w/VRS	000617	% 0	2.64	Z00 bopd	Pd Pd	1,000 Ba	Barrels	÷	25	2,190	8,760
	Hibbard #7: Test Tank w/VRS	000618	ON O	2.64	98 bopd	둺	500 Ba	Barrels	τ-	24	2,190	8,760
	Hibbard #7: Stock Tank w/VRS	992000	% Ô	7. 19.	200 bopd	pd	1,000 BB	Barrels		24	2,190	8,760
	TF #10: Crude Oil Slop Tank	008302	SWO OWN	2.64	300 bopd	젎	2,000 Ba	Barrels	ç	74	2,190	8,760
	■F #17: Test Tank	000611	WO	2.64	36 bopd	둺	200 Bs	Barrels		24	2,190	8,760
	TF #18: Test Tank w/VRS	000612	₩O	2.64	500 bopd	Ы	1,000 Bs	Barrels	-	75	2,190	8,760
	TF #18: Wash Tank w/VRS	000613	W/O	2.64	588 bopd	g	1,250 B8	Barrels	-	24	2,190	8,760
	IF #18; Crude Tank w/VRS	112293	Ννο	2.64	588 bopd	젎	1,000 BE	Barrels	-	į.	2,190	8,760
	Machader: Oil Recovery Tank	000620	SNO ON	0.50	Pdod 05	Pd	100 Bs	Barrels	₩-	Ž.	2,190	8,760
	Perkins: Hot Water Tank	008303	ΔVO	0.50	pdoq 0	Ы	500 BB	Barrels	-	24	2,190	8,760

Table 5.1-1
Permit to Operate 12925
E&B South Cuyama Unit
Equipment Description
Page 2 of 2

Equipmon*		Dorrigo								1	Hours Dor	[
rdaibinem.		מייים מייים		,	;	:			,			
Category	Description	彗	Feed	Feed Parameter Capacity	Capacity	Units	Size Ur	Units	Load	day	qtr	year
				Service								
Pits, Well Cellars, Wastewater	1F #2: Pit	000742	WWO	tertiary	I	1	84	sq. feet	-	7.	2,190	8,760
	TF #2: Wastewater Pits	000855	NVO OVIII	tertiary	ŀ	ı	18 sq.	feet	-	17	2,190	8,760
	TF #5: Wastewater Pit	000745	NVO	tertiary	l	1	126 84.	. feet	-	77	2,190	8,750
	TF#8: Wastewater Pits	000860	MO	secondary	J	1	18 80.	. feet		24	2,190	8,760
	TF #7: Pits (Hibbard)	000861	MVO	secondary	ı	1	18 sq.	. feet	-	17	2,190	8,760
	TF #7: Pit (Hibbard)	000746	WVO	tertiary	t	1	90 aq.	. feet	_	24	2,190	8,760
	〒 #10: Pit	000748	36/O	tertiary	ı	ı	යිව සිට	. feet	-	24	2,190	8,760
	TF #10; Wastewater Pits	000863	WO O	secondary	1	}	18 84.	. feet	-	25	2,190	8,760
	TF #17: Pit	000755	W/0	tertiary	ı	;	108 sq	sq. feet	τ-	77	2,190	8,760
	TF #18: Wastewater Pits	000872	.wo	secondary	ł	ı	18 89.	. feet	.	17 17	2,190	8,780
	규F #18: Pit	997000	WO	tertiary	ı	1	117 sq.	. feet	-	23	2,190	8,760
	Machader WWTP: Pit	000878	W/O	tertiary	1		150 sq.	. feet	ŗ-	24	2,190	8,760
	Machader WWTP: Pit	000879	₩o	tertiary	ı	ı	3,000 sq.	. feet	Ψ-	참	2,190	8,760
	Perkins WWTP: Pit	000880	W/0	tertiary	1	ı	1,980 sq.	. feet		24	2,190	8,760
	Perkins W/MTP: Pit	000881	O.W.	tertiary	ı	1	4,500 89	sq. feet	-	24	2,190	8,730
	Perkins WWTP: Pit	000882	wo	tertiary	ı	1	540 89	sq. feet	τ-	24	2,150	8,760
	Perkins WWTP: Pit	000883	WO	tertiary	ı	t	1,800 8q.	. feet	÷	27	2,190	8,760
	Perkins: Wastewater Pit	000762	W/O	tertiary	1	ļ	ig.	. feet	-	74	2,190	8,750
	Perkins WWTP: Wastewater Pit	000877	WO	tertiary	1	ı	တ	. feet	.	첝	2,190	8,760
	Well Cellars	000740	Š	primary	ŀ	ı	8,192 sq.	. feet		74	2,190	8,760
	Perkins: Wastewater Tank	000759	WO	tertiary	ı	ı	ලපු පුර	. feet	τ-	24	2,190	8,760
	Perkins: Wastewater Tank	000760	W/O	tertiary	ł	ł	693 aq	sq. feet	-	23	2,190	8,760
	Machader WWTP: Wastewater Tank	101038	0,000	tertiary	-	ţ	693 sq	sq. feet	-	24	2,190	8,780
	Machader WWTP: Wastewater Tank	000875	WO	tertiary	i	1	1,170 sq.	. feet	-	24	2,190	8,760
Gas Station	Gas Station	101045	I	I	38,000 gallyr	aliyr	12,000 gallons	llons	-	(7) 15	2,190	8,750
Solvents	Solvents	104998	1	1	5,000 galyear	aliyear	5,000 gallons	llons		24	2,190	8,760

Table 5.1-2
Permit to Operate 12925
E&B South Cuyama Unit
Emission Factors
Page 1 of 2

Equipment Category	Description	Device ID#	NOx	ROC	00	SOx	PM	PM10 Units	References
Ext. Combustion Perkins: Hot Wat	Perkins: Hot Water Heater	000631	0.0980	0.0054	0.0824	0.1381 0.0075	0.0075	0.0075 lb/MMBtu	∢
Fugitives	Valves and Fittings Pumps/Compressors and Wellheads	101050 000738	f 1		, ,	1 1	i)	i 1	۵۵
Tanks	TF #2: Stock Tank w/VRS TF #2: Wash Tank w/VRS TF #2: LACT Tank w/VRS TF #2: LACT Tank w/VRS TF #2: Test Tank w/VRS TF #8: 1,500 bbl Wash Tank w/VRS TF #8: 1,250 bbl Wash Tank w/VRS TF #8: LACT Tank w/VRS TF #8: LACT Tank w/VRS Hibbard #7: Wash Tank w/VRS Hibbard #7: Stock Tank w/VRS Hibbard #7: Stock Tank w/VRS TF #10: Crude Oil Slop Tank TF #11: Test Tank TF #12: Test Tank TF #12: Test Tank TF #13: Wash Tank w/VRS TF #18: Wash Tank w/VRS TF #18: Wash Tank w/VRS	000586 000588 000589 000594 105964 105964 000763 000618 000618 000613 000613 000613 000613 000613	တိ	See Attached Worksheets for Emission Factors	Vorksheet	for Emis	sion Fac	0 F3	
	nachaver, oil recovery rails Perkins: Hot Water Tank	008303							m m

Table 5.1-2
Permit to Operate 12925
E&B South Cuyama Unit
Emission Factors
Page 2 of 2

Equipment Category	Description	Device ID#	NOX	ROC	8	\$0x	E	PM10	Units	References
Pits, Well Cellars, TF #2: Pit	TF #2: Pit	000742	,	0.00870			,	,	Pisa, fl./dav	ť
Wastewater	HE HV. Wastewater Dis	000855	,	0.00870	i	1	ı	,	This # 1day) د
	TF #6: Wastervater Pit	000745		0.00870		ı ı	ı t	ı ı	lb/sq. ft/day	ن ن
	TF #6: Wastewater Pits	000860	1	0.01800	,	1	ı	,	lb/sq. ft./day	ப
	TF #7: Pits (Hibbard)	000861	1	0.01800	,	,	,	,	lb/sq. ft./day	ပ
	TF #7: Pit (Hibbard)	000746	1	0.00870	,	,	ı	1	lb/sq. ft./day	ပ
	TF #10: Pit	000748	1	0.00870	,	,	ı	1	lb/sq. ft./day	ن
	TF #10: Wastewater Pits	000883	ı	0.01800	1	ı	ı	•	lb/sq. ft./day	ن
	TF #17: Pit	000755	1	0.00870	,	1	ı	ı	lb/sq. ft./day	U
	TF #18: Wastewater Pits	000872	1	0.01800	,	,	,	ı	lb/sq. ft./day	ن
	TF #18: Pit	000756	,	0.00870	ı	ı	,	1	lb/sq. ft./day	ပ
	Machader WWTP: Pit	000878	,	0.00870	ı	ı	,	ı	lb/sq. ft./day	ن
	Machader WWTP: Pit	628000	,	0.00870	,	,	•	ı	lb/sq. ft./day	ن
	Perkins WWTP: Pit	000880	,	0.00870	ı	1	ı	1	lb/sq. ft./day	ധ
	Perkins WWTP: Pit	000881	•	0.00870	ı	ī	,	ì	lb/sq. ft./day	ن
	Perkins WWTP: Pit	000882	ı	0.00870	1	1	ı	r	lb/sq. ft./day	ധ
	Perkins WWTP: Pit	000883	,	0.00870			ì	,	lb/sq. ft./day	ப
	Perkins: Wastewater Pit	000762	•	0.00870	ı	ı	ı	t	lb/sq. ft./day	ப
	Perkins WWTP: Wastewater Pit	778000	ı	0.00870	•	•	•	ŧ	lb/sq. ft./day	ധ
	Well Cellars	000740	1	0.04140	ı	,	1	ì	lb/sq. ft./day	വ
	Perkins: Wastewater Tank	000759		0.00131	,	1	,	ı	lb/sq. ft./day	U
	Perkins: Wastewater Tank	000760	ı	0.00131	ı	ı	ı	ı	lb/sq. ft./day	ധ
	Machader WWTP: Wastewater Tank	101038	1	0.00131	1	1	1	ı	lb/sq. ft./day	ധ
	Machader WWTP: Wastewater Tank	000875	1	0.00131	ı	1	1	ı	lb/sq. ft./day	ပ
Gas Station	Gas Station	101045	ı	See Calculation Sheet in Section 10	Sheet in	Section 1				ĭĿ
Solvents	Solvents	104998	•	See Calculation Sheet in Section 10	Sheet in	Section 1	0			ш

Table 5.1-3
Permit to Operate 12925
E&B South Cuvama Unit
Hourly and Daily Emissions
Page 1 of 2

Equipment		Device	NOX	×	ROC	L)	8		ŞÖX		PE		PM110		ļ.	Enforceability
Category	Emissions Unit	#0	lbifhr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr Ik	lb/day [lb/hr lb	lb/day	lb/hr II	lb/day	mi I	and its basis
Ext. Combustion	Perkins: Hot Water Heater	000631	0.10	2.35	0.04	0.13	0.08	59. 89.	0.14	3.27	0.01	0.18	0.01	0.18	4	
Fugitives	Valves and Fittings	101050	,	1	7.72	185.17	ı	,	,	,	,	,		,	₫.	
	Pumps/Compressors and Wellheads	000738	ı	1	0.15	3.55	,	,	,	,	í	,	ı	1	⊲(
Tanks	TF #2: Stock Tank w/VRS	000586	,	,	0.02	0.51	,		,	,	1			,	ব	
	TF #2: Wash Tank w/VRS	000587	•	1	0.00	0.08	,	,	ı	,	,	,	ı	•	ব	
	TF #2: LACT Tank w/VRS	000588	,	•	90.0	1. 1.	,	ı	,		,	,	,	1	ব	
	TF #2: Test Tank w/VRS	000589	,	,	0.02	0.43	1)	,	,	,	1	,	,	ব	
	TF #6: Test Tank w/VRS	000594	,	•	0.02	0.43	1	ı	,	ı	,		,	1	H	ATC 10954
	TF #8: 1,500 bbl Wash Tank w/VRS	105087	,	1	0.00	0.03	,	ı		ı	,	,	,	,	出	ATC 10954 & 12883
	TF #6: 1,250 bbl Wash Tank w/VRS	105964	1	,	0.00	0.03	,	,	,	,	ı	,	,	,	世	ATC 11558 & 12883
	TF #8: 5,000 bbl Wash Tank w/VRS	109943	,	•	0.00	0.10	,	ı	,	,	,	,	,	,	出出	ATC 12279 & 12883
	TF #8: LACT Tank w/VRS	000596	ı	,	0.20	4.71	,	1	,	,	,	,	,	,	出	ATC 10954 & 12883
	TF #8: LACT Tank w/VRS	000763	,	,	0.20	4.71	1	,	,	,	,	1	,	ı	世	ATC 10954 & 12883
	Hibbard #7: Wash Tank w/VR	000616	ı	,	0.00	0.04	,	1	,	ı	,	,	ı	,		
	Hibbard #7: Stock Tank w/VRS	000617		1	0.03	0.78	ı	,	1	,	,	,	,	ı	ব	
	Hibbard #7: Test Tank w/VRS	000618	ŧ	1	0.01	0.30	ı	,	,	,	ı	,	1	,	ব	
	Hibbard #7: Stock Tank w/VRS	000768	,	1	0.03	0.78	,	,	1	,	,	,	,	ı	ব	
	TF #10: Crude Oil Slop Tank	008302	,	,	0.06	수 다	ı	,	,	ı	,	ı	,	ı	丑	ATC 9592
	IF #17: Test Tank	000611	•	ı	0.12	2.90	,	,	1	,	,	,	,	,	出	ATC 7250
	TF #18: Test Tank w/VRS	000612	,	,	0.04	0.99	ı	,	1	ı	,	1	,	,	出	ATC 12925
	TF #18: Wash Tank w/VRS	000613	í	,	0.00	0.08	1	,	ŧ	,	1	,	1	•	⊲(
	TF #18: Crude Tank w/VRS	112293	1	,	0.04	1.07		,	,	,	,	,			丑	ATC 12925
	Machader: Oil Recovery Tank	000620	ı	•	0.01	0.16	ı	ı	•	1	,	1	,	ì	* [
	Perkins: Hot Water Tank	008303	ı	•	0.01	0.04	1	,		ı	ı	1	,	1	×1(

Table 5.1-3
Permit to Operate 12925
E&B South Cuyama Unit
Hourly and Daily Emissions
Page 2 of 2

Equipment		Device	M	NOx	ROC		00		SOx		PIM		PM110		Enforceability	l
Category	Emissions Unit	# 🖸	lbihr	b/hr lb/day	lb/hr	lb/day	lb/hr I	lb/day	lb/hr lb	lb/day	lb/hr lb/day	ay Ib/hr	r Ibiday	>-	and its basis	ı
Pits. Well Cellars.	;	!				į										
Wastewater	F #2: Pf	000742	,	1	0.029	0.70	,	,	1	1	1	1	ſ	ા (
	TF #2: Wastewater Pits	000855	,	,	0.007	0.16	ı	ı	ı	1	1	'	١	ব		
	TF #6: Wastewater Pit	000745	,	ı	0.048	1.10	ı	ı	ı	,	1	1	1	∢(
	TF #8: Wastewater Pits	000890	•	1	0.014	0.32	ı	ı	ı	,	,	'	•	4		
	TF #7: Pits (Hibbard)	000861	1	ı	0.014	0.32	ı	ı	ı	,	,	1	1	ব(
	IF #7: Pit (Hibbard)	000746	1	•	0.033	0.78	,	,	1	,	,	'	•	ব		
	TF #10: Pit	000748	,	,	0.036	0.86	1	ı	,	1	,	•	١	ব		
	TF #10: Wastewater Pits.	000863	ı	ı	0.014	0.32	,	1	ı	,	1	1	,	ব		
	TF #17: Pit	000755	,	1	0.039	0.94	1	ı	,	,	'	1	,	ব		
	TF#18: Wastewater Pits	000872	1	1	0.014	0.32	ı	ı	,	,	,	1	1	∢(
	TF #18: Pit	000756	1	ı	0.042	1.02	,	,		,	,	1	ı	ব্		
	Machader WWTP: Pit	000878	,	,	0.054	1.33	1	,	1	ı	i	'	•	ব		
	Machader WWTP: Pit	978000	1	ı	1.088	26.10	1	,	,	,	,	,	1	ব		
	Perkins WWTP: Pit	000880	•	,	0.718	17.23	ı	ı	ı	,	,	•	•	ব		
	Perkins WWTP: Pit	000881	,	1	1.631	39.15	,	ı	ı	ı	,	•	٠	ৰ		
	Perkins WWTP: Pit	000882	•	•	0.196	4.70	,	1	1	1	1		1	ব		
	Perkins WWTP: Pit	000883	•	1	0.653	15.66	. 1	1	ι	ı	ŀ		٠	ব		
	Perkins: Wastewater Pit	000762	ı	1	0.016	0.39	ı	1	ı	,	,	•	,	ব		
	Perkins WWTP: Wastewater Pit	778000	ı	ı	0.01	0.08	ı	,	,	,	•	•	٠	ব		
	Well Cellars	000740	1	,	10.68 2	256.35	,	ı	ı	1	1	•	1	ব		
	Perkins: Wastewater Tank	000759	ı	ı	0.038	0.91	,	1	,	,	,	•	•	শ্(
	Perkins: Wastewater Tank	000760	ı	ı	0.038	9.0	ı	ŧ	ı	ŧ	1	•	1	শ(
	Machader WWTP: Wastewater Tank	101038	ı	1	0.038	0.91	ı	ı	1		1	ı	ı	ঝ		
	Machader WWTP: Wastewater Tank	000875	٠	ı	\$⊕0.0	£.	·	•	,		,	•	1	শ(
1 1 1 1 1 1	1.00	11 0 7				r T								ii ii	() 7 7 6 6	
cas station	Gas diation	0 0 0 1 0 1		ı	1	71.0	ı	ŀ		ı		•	1	L L	8 2 2 3 4 4	
Solvents	Solvents	104998	ı	ı	0.23	5.57	ŧ	ŧ	1	,	,	,	•	**(

Table 5.1.4
Permit to Operate 12925
E&B South Cuyama Unit
Quarterly and Annual Emissions
Page 1 of 2

Category		Device	Š	مرة	ည္ရ		පි		ŠOŠ	ų	2		2	5	Fed, En	Fed, Enforceability
	Emissions Unit	#0	TPQ	ТРУ	TPQ	ΤΡΥ	TPQ	ТРУ	TPQ	ТРУ	TPQ	ТРҮ	TPO	ТРҮ	and	and its basis
Ext. Combustion	Perkins: Hot Water Heater	000631	0.11	0.43	0.01	0.02	0.09	0.36	0.15	09.0	0.01	0.03	0.01	0.03	ব	
Fugitives	Valves and Fittings	101050	,	ı	නු කු. බු	33.79	ı	,	,	,	,	ı	,		ব	
	Pumps/Compressors and Wellheads	000738	ì	1	0.16	0.85	ı	,	,	ı	,	1	,		ব	
Tanks	TF #2: Stock Tank w/VRS	000586	1	,	0.02	0.09	,	,	ı	•	ı	ı	,	,	⊲(
	TF #2: Wash Tank w/VRS	000587	ı	1	0.00	0.01	ı	,	,	,	ı	,	ı	,	ব	
	TF #2: LACT Tank w/VRS	000588	•	1	0.07	0.28	ı	,	,	ı		1	,	,	4 (
	TF #2: Test Tank w/VRS	000589	,	ı	0.02	0.08	,	,	ı	,	,	ı	,	,	∢	
	TF #6: Test Tank w/VRS	000594	ı	ı	0.02	90.0	ı	,	ı	ı	,	,	,	ı	FE ATC	ATC 10954
	TF #6: 1,500 bbl Wash Tank w/VRS	105087		ı	0.00	0.01	1	,	,	ı		,	,	ı	FE ATC	ATC 10954 & 12883
	TF #6: 1,250 bbl Wash Tank w/VRS	105964	1	,	0.00	0.01	,	,	,	,	,	,	,	,	FE ATC	ATC 11558 & 12883
	TF #6: 5,000 bbl Wash Tank w/VRS	109943	ı	,	0.01	0.02	,	,	1	,	1	ı	,	ı	FE ATC	ATC 12279 & 12883
	TF #8: LACT Tank w/VRS	965000		1	0.22	98.0	•	ı	,		,	,	,	1	FE ATC	ATC 10954 & 12883
	TF #6: LACT Tank w/VRS	000763	•	1	0.22	98.0	,	,	,	ı	,	,	,	1	FE ATC	ATC 10954 & 12883
	Hibbard #7: Wash Tank w/VR	000616	ı	ı	0.00	0.01	,		1	,	ı	,	ı	,	- 4	
	Hibbard #7: Stock Tank w/VRS	000617	,		0.04	0.14	,	ı	,	,		•	٠	,	ব	
	Hibbard #7: Test Tank w/VRS	000618	,	1	0.01	0.05	,	,	,	•	•	1	,	,	ব	
	Hibbard #7: Stock Tank w/VRS	992000	ı	,	0.04	0.14	,	ı	ŀ	,	ı	,	,	,	ব	
	TF #10: Crude Oil Slop Tank	008302	ı	,	0.07	0.26	,	1	ı	,	,	,	,		FE ATC	ATC 9592
	TF #17: Test Tank	000611	,	,	0.13	0.53	,	,	,	,	,	,	1	1	FE ATC	ATC 7250
	TF #18: Test Tank w/VRS	000612	,	,	0.05	0.18	,	1.	,	,	,	,	,	1	FE ATC	ATC 12925
	TF #18: Wash Tank w/VRS	000613	1	ı	0.00	0.01	ı	ı	,	1	١	1	,	1	ব	
	TF #18: Crude Tank w/VRS	112293	ı	ı	0.05	0.19	1	,	,	ı	•	ı				ATC 12925
	Machader: Oil Recovery Tank	000620	•	1	0.01	0.03	ı	ı	ı	,	,	ŧ	1	,	* : (
	Perkins: Hot Water Tank	008303	ı	ſ	0.01	0.04	,	ı	,	1	•	,	,	1	* 1	

Table 5.1.4
Permit to Operate 12925
E&B South Cuyama Unit
Quarterly and Annual Emissions
Page 2 of 2

			!				1							١		Γ
category	Emissions Unit	D# ID#	TPQ T	X TPŸ	TPQ	Ρ̈́Υ	TPQ	ТРҮ	TPQ 1	¥	TPQ TI	TPY	PM10 TPQ T	U TPY	Fed. Enforceability and its basis	
Pits, Well Cellars, Wastewater	∓F #2: Pit	000742	,	1	0.03	0.13	,	1	,	1		ı	,	1	<(,	
	TF #2: Wastewater Pits	000855	ı	1	0.01	0.03	ı	ı	ı	,	,		ı	,	ব	
	IF #8: Wastewater Pit	000745	,	,	0.05	0.20	ı	,	ı	,	,	,	ı	,	ব	
	IF #6: Wastewater Pits	000860	1	ı	0.01	90.0	ı	,	,	,	,	ı	1	ı	<1`	
	TF #7: Pits (Hibbard)	000861	1	,	0.01	90.0	ı	ı	,	ı	ı	,		ı	<[
	TF #7: Pit (Hibbard)	000746	•	ı	0.04	0.14	1	1	ı	,	1	ı	,	,	⊲(
	■F #10: Pit	000748	ı	ı	0.04	0.18	1	,	,	1	ı	,	,	,	ব	
	IF #10: Wastewater Pits	000863	ı	,	0.01	0.06	ı		,	ı	,	,	ı	ı	ব	
	TF #17: Pit	000755	ı	1	0.04	0.17	1	ı	,	1	1	ı	,	1	ব	
	TF #18: Wastewater Pits	000872	,	,	0.01	0.09	,	1	1	ı	,	ı	ı	ı	ব	
	TF #18: Pit	000756	,	,	0.05	0.19	,	ı	ı	ı	,	ı	,	,	ব	
	Machader WWTP: Pit	000878	1	,	0.06	0.24	,	,	1	ı	ı	ı	ı	,	ব	
	Machader WWTP: Pit	978000	1	ı	1 .19	4.78	ı	ı	ı	,	,	ı	,	,	ব	
	Perkins WWTP: Pit	000880	1	ı	0.79	63 4	,	,	1	,	ı	,	ı	,	ব	
	Perkins WWTP; Pit	000881	ı	ŧ	1.79	7.14	1	ì	1	1	ı	1	ı	ı	ৰ:(
	Perkins WWTP; Pit	000882	1	ı	0.21	0.88	1	1	ı	,	1	ı	,	ı	ব	
	Perkins WWTP: Pit	000883	ı	,	0.71	2.88	1	,	,	1		,	,	1	٠:(
	Perkins: Wastewater Pit	000762	,	1	0.02	70.0	,	ı	,	,	,	,	,	,	ব	
	Perkins WWTP: Wastewater Pit	000877	•	,	0.00	0.01	,	,	ı	1	,	,	ı	ļ	্র	
	Well Cellars	000740	1	1	11.70	46.78	ı	ı	ı	,	,	1	,	,	ং	
	Perkins: Wastewater Tank	000759	ı	,	0.04	0.17	,	,	1	1	ı	,	,	1	ব	
	Perkins: Wastewater Tank	000760	,	•	0.04	0.17	,	,	1	1	ı	,	,	ı	ব	
	Machader WWTP: Wastewater Tank	101038	•	,	0.04	0.17	ı	•	,	,	ı	ı	,	,	ব	
	Machader WWTP: Wastewater Tank	000875	1	i	0.07	0.28		1	ı	ι	ì	1	1	1	ন্	
Gas Station	Gas Station	101045	1	F	₹/N	0.02	1	ŧ	ı	1	1		1	1	FE 11136	8
Solvents	Solvents	104998	1	ı	0.28	1.02		ı	,	ı	1	1	,	,	ব	
		1				:									(



PERMIT EVALUATION FOR PROPOSED MINOR PART 70 REVISION / PERMIT TO OPERATE 12925

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1.0 BACKGROUND

- 1.1 <u>General</u>: This permit converts the modifications made at the South Cuyama Unit under ATC 12883, ATC Mod 12883-01 and ATC 12925 into a Permit to Operate. The application for PTO 12283 was received on September 24, 2009 and deemed complete on October 7, 2009. The application for Permit to Operate 12925 was received on June 29, 1009 and deemed complete on July 29, 2009.
- 1.2 <u>Permit History</u>: The following permits have been issued for the South Cuyama Unit since the last permit reevaluation:

PERMIT	FINAL ISSUED	PERMIT DESCRIPTION
PT-70/Reeval 07250 R7	06/02/2008	Permit Reevaluation. Oil production equipment at the SCU.
ATC 12925	03/01/2009	Install a 1,000 barrel crude oil storage tank at Tank Farm #18. Correct emissions calculations for the wash tank, increase test tank throughput.
ATC 12883	03/03/2009	Increase the true vapor pressure limit for the LACT tanks at Tank Farm #6 at SCU. Decrease TVP in 3 wash tanks from 8.0 to 2.64 psia.
ATC Mod 12883 01	07/06/2009	Decrease the true vapor pressure limit for the LACT tanks at Tank Farm #6 at SCU.
ATC 13306	11/03/2009	Installation of an aboveground storage tank and dispensing cabinet with Phase I and Phase II. The tank is 500 gallons and the dispenser has one nozzle.

1.3 <u>Compliance History</u>: No compliance actions have been taken since PT-70/Reeval 07250 R7 was issued in June 2008. See PT-70/Reeval 07250 R7 for a complete compliance history.

2.0 ENGINEERING ANALYSIS

2.1 Equipment/Processes:

Tank Farm #6: Natural gas liquids from Gas Plant 10 are blended with produced crude in the LACT tanks at Tank Farm #6. Approximately 30 bbls/day of NGLs are injected into a perforated pipe that is located two feet from the bottom of each tank. As the field ages, the volume of oil produced declines while the volume of NGLs in the gas stream increases, thus increasing the vapor pressure of the combined liquids. The mixture of crude oil and NGLs is shipped from the facility via pipeline. Vapors from the tanks are collected by the VRS and returned to the inlet of Gas Plant 10.

PERMIT EVALUATION FOR PROPOSED PART 70 MINOR REVISION 12925 / PERMIT TO OPERATE 12925

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Tank Farm #18: Oil water and gas are piped to Tank Farm #18 for separation. Individual wells can be produced into the test tank to measure their productivity. Vapors from the tanks are collected by the VRS and returned to the inlet of Gas Plant 10.

2.2 <u>Emission Controls</u>: A fugitive hydrocarbon inspection and maintenance program is used to comply with APCD Rule 331. An 80-percent reduction is applied to valves, fittings, and wellheads for implementation of Rule 331.

The tanks are equipped with a vapor recovery system. A 95-percent control efficiency is applied for the use of vapor recovery.

- 2.3 <u>Emission Factors</u>: Emission factors and calculations for this project are documented in Attachment "A".
- 2.4 <u>Reasonable Worst Case Emission Scenario</u>: The worst case scenario is based on operation 24 hours/day, 365 days/year at the maximum permitted throughput levels.
- 2.5 <u>Emission Calculations</u>: Detailed emission calculation spreadsheets may be found in Emission Calculations Attachment. These emissions define the Potential to Emit for the permitted equipment.
- 2.6 Special Calculations: There are no special calculations.
- 2.7 BACT Analyses: Best Available Control Technology was not required for this project.
- 2.8 <u>Enforceable Operational Limits</u>: The permit has enforceable operating conditions that ensure the equipment is operated properly.
- 2.9 <u>Monitoring Requirements</u>: Monitoring of the equipment's operational limits are required to ensure that these are enforceable. This permit requires monitoring the volume of oil processed through Tank Farm #18 and the parameters required by APCD Rules 325.F and 331.G.
- 2.10 <u>Recordkeeping and Reporting Requirements</u>: The permit requires that the data which is monitored be recorded and reported to the APCD.

3.0 REEVALUATION REVIEW (not applicable)

4.0 REGULATORY REVIEW

4.1 <u>Partial List of Applicable Rules</u>: This project is anticipated to operate in compliance with the following rules:

Rule 101. Compliance of Existing Facilities

Rule 201. Permits Required

Rule 202. Exemptions to Rule 201

Rule 205. Standards for Granting Permits

Rule 303. Nuisance

PERMIT EVALUATION FOR PROPOSED PART 70 MINOR REVISION 12925 / PERMIT TO OPERATE 12925

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Rule 325.	Crude Oil Production and Separation
Rule 331.	Fugitive Emissions Inspection and Maintenance
Rule 505.	Breakdown Procedures
Rule 801.	New Source Review
Rule 802.	Nonattainment Review
Rule 803.	Prevention of Significant Deterioration

4.2 Rules Requiring Review: None

4.3 <u>NEI Calculations</u>: The net emission increase calculation is used to determine whether certain requirements must be applied to a project (e.g., offsets, AQIA, PSD BACT). This permit does contribute to the NEI.

5.0 AQIA

The project is not subject to the Air Quality Impact Analysis requirements of Regulation VIII.

6.0 OFFSETS/ERCs

- 6.1 Offsets: The emission offset thresholds of Regulation VIII are not exceeded.
- 6.2 ERCs: This permit action does not generate emission reduction credits.

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this permitting action.

8.0 CEQA/LEAD AGENCY

This project is exempt from CEQA pursuant to the Environmental Review Guidelines for the Santa Barbara County APCD (revised November 16, 2000). Appendix A.2 (*Equipment or Operations Exempt from CEQA*) specifically exempts Permits to Operate. No further action is necessary.

9.0 SCHOOL NOTIFICATION

A school notice pursuant to the requirements of H&SC §42301.6 was not required.

10.0 PUBLIC and AGENCY NOTFICATION PROCESS/COMMENTS ON DRAFT PERMIT

This project was not subject to public notice. In a March 2, 2010 email, Ms. Kim Kelley stated that E&B had no comments on the draft version of this permit.

11.0 FEE DETERMINATION

Fees for the APCD's work effects are assessed on a fee basis. The Project Code is 300000 (Onshore Oil and Gas). See the Fee Statement Attachment for the fee calculations.

PERMIT EVALUATION FOR PROPOSED PART 70 MINOR REVISION 12925 / PERMIT TO OPERATE 12925

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RECOMMENDATION 12.0

It is recommended that this permit be granted with the conditions as specified in the permit.

03/04/10

13.0 ATTACHMENTS

- Figures & Tables A.
- B. Fee Statement

Attachment "A" Figures & Tables

I. This Projects "I" NEI-90

Permit	Date	No	Эx	R	OC OC		0	S	Ox	Ρ	М	PN	110
No.	Issued	lb/day	ton/yr										
Totals		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

II. This Source's "P1s"

Enter all facility "P1" NEI-90s below:

Permit	Date	N	Оx	R	OC	C	0	S	Эx	Р	M	PM	110
No.	Issued	lb/day	ton/yr										
PTO 7250 - R7	6/2/2008			21.46	3.82								
PTO 8010 - R6	6/2/2008			0.00	0.00								
PTO 9136 - R5	6/2/2008	1.53	0.28	17.80	3.25	1.29	0.23	0.21	0.04	0.12	0.02	0.12	0.02
ATC 12599	9/25/2008			0.00	0.00								
ATC 12925	3/1/2009			2.14	0.39								
ATC 12883 - 01	7/8/2009			9.59	1.75								
ATC 12913	7/6/2009			11.35	2.07								
ATC 13306	11/3/2009			0.18	0.03								
Totals		1.53	0.28	62.52	11.31	1.29	0.23	0.21	0.04	0.12	0.02	0.12	0.02

Notes:

(1) Facility NEI from IDS.

III. This Source's "P2" NEI-90 Decreases

Enter all facility "P2" NEI-90s below:

Permit	Date	N	Эx	RO	C	С		S	Ox	Р	M	PM	10
No.	Issued	lb/day	ton/yr										
ATC 12883 - 01				11.69	2.51								
Totals		0.00	0.00	11.69	2.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

(1) Facility NEI from IDS.

IV. This Source's Pre-90 "D" Decreases

Enter all facility "D" decreases below:

Permit	Date	N	Dχ	R	OC .	С		S	Эx	Р	М	PN	110
No.	Issued	lb/day	ton/yr										
Totals		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

(1) Facility "D" from IDS.

V. Calculated This Source's NEI-90

Table below summarizes facility NEI-90 as equal to: I+ (P1-P2) -D

	No	x ROC		co		SOx		PM		PM10		
Term	lb/day	toniyr	lb/day	ton/yr								
Project "I"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1	1.53	0.28	62.52	11.31	1.29	0.23	0.21	0.04	0.12	0.02	0.12	0.02
P2	0.00	0.00	11.69	2.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FNEI-90	1.53	0.28	50.83	8.80	1.29	0.23	0.21	0.04	0.12	0.02	0.12	0.02

Notes:

- (1) Resultant FNEI-90 from above Section I thru IV data.
- (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
- (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

Attachment "B" Fee Statement

FEE STATEMENT

PTO No. 12925

FID: 01074 South Cuyama Unit (SCU) / SSID: 01073



Device Fee

		Γ	T-	12		
			1		Device	
	Device Fee Total =	Device Fee Sub-Totals =	Administrative Changes	Device Name		
			F6	Schedule	Fee	
			1	Units	Qty of Fee	
			365	Unit Units	per Fee	Fee
			No	Apply?	Min. Fee	Max or
				Devices	of Same	Number
				Factor	Pro Rate	
		\$141.12		Fee	Device	
		\$0.00	0.00	Fee?	Penalty	
		\$0.00	0.00			
900000	00 2725		365.00	per Device	Total Fee	

Permit Fee

Fee Based on Devices

365.00

Fee Statement Grand Total = \$365

- Notes:

 (1) Fee Schedule Items are listed in APCD Rule 210, Fee Schedule "F".

 (2) The term "Units" refers to the unit of measure defined in the Fee Schedule.

FID: 01074

Permit: P 12925

SSID: 01073

Santa Barbara County Air Pollution Control District

MAR 0 5 2010

Certified Mail 7009 2250 0004 4642 3507 Return Receipt Requested

Kim Kelley E & B Natural Resources PO Box 179 New Cuyama, CA 93254

Re: Final Permit to Operate 12925

Fee Due: \$ 365

Dear Ms. Kelley:

Enclosed is final Permit to Operate (PTO) 12925 for changes made under ATC 12883. ATC 12883-01, and ATC 12925 at the South Cuyama Unit. Please carefully review the enclosed documents to ensure that they accurately describe your facility and that the conditions are acceptable to you. Note that your permitted emission limits may, in the future, be used to determine emission fees.

You should become familiar with all APCD rules pertaining to your facility. This permit does not relieve you of any requirements to obtain authority or permits from other governmental agencies.

This permit requires you to:

- Pay a **fee** of \$365, which is due immediately and is considered late after 30 calendar days from the date stamped on the permit. Pursuant to APCD Rule 210.IV.B, no appeal shall be heard unless all fees have been paid. See the attached invoice for more information.
- Follow the conditions listed on your permit. Pay careful attention to the recordkeeping and reporting requirements.
- Ensure that a copy of the enclosed permit is posted or kept readily available near the permitted equipment.
- Promptly report changes in ownership, operator, or your mailing address to the APCD.

If you are not satisfied with the conditions of this permit, you have thirty (30) days from the date of this issuance to appeal this permit to the Air Pollution Control District Hearing Board (ref: California Health and Safety Code, §42302.1). Any contact with APCD staff to discuss the terms of this permit will not stop or alter the 30-day appeal period.

Please include the facility identification (FID) and permit numbers as shown at the top of this letter on all correspondence regarding this permit. If you have any questions, please contact Philip Sheehan of my staff at (805) 961-8876.

Sincerely,

Michael Goldman, Manager

Engineering & Compliance Division

enc: Final PTO 12925

Final Permit Evaluation Invoice # P 12925

Air Toxics "Hot Spots" Fact Sheet APCD Form 12B

cc: South Cuyama Unit (SCU) 01074 Project File NC/SC

ECD Chron File

Accounting (Invoice only)

Craig Strommen (Cover letter only)

\\Groups\ENGR\\WP\\PTO\$RCE\\PERMITS\O&G-PROD\\E&B-Cuyama\\SCU\\PTO\$\\PTO 12925\\PTO 12925 - Final Letter - 3-4-2010.doc



Post Office Box 6447 Santa Barbara, CA 93160-6447 Invoice: P 12925
Date: MAR 0 5 2010
Terms: Net 30 Days

300000/6600/3280

INVOICE

BILL TO:	FACILITY:				
Kim Kelley	South Cuyama Unit (SCU)				
E & B Natural Resources (103450)	01074				
PO Box 179	South Cuyama Unit				
New Cuyama, CA 93254	Cuvama				

Permit to Operate (PTO) No. 12925

Fee Type: Permit Evaluation Fee (see the Fee Statement in your permit for a breakdown of the fees)

Amount Due: \$365

REMIT PAYMENTS TO THE ABOVE ADDRESS

Please indicate the invoice number P 12925 on your remittance.

IF YOU HAVE ANY QUESTIONS REGARDING YOUR INVOICE PLEASE CONTACT OUR ADMINISTRATION DIVISION AT (805) 961-8800

The APCD charges \$25 for returned checks. Other penalties/fees may be incurred as a result of returned checks and late payment (see APCD Rule 210). Failure to pay this Invoice may result in the cancellation or suspension of your permit. Please notify the APCD regarding any changes to the above information